



# Bobcat®

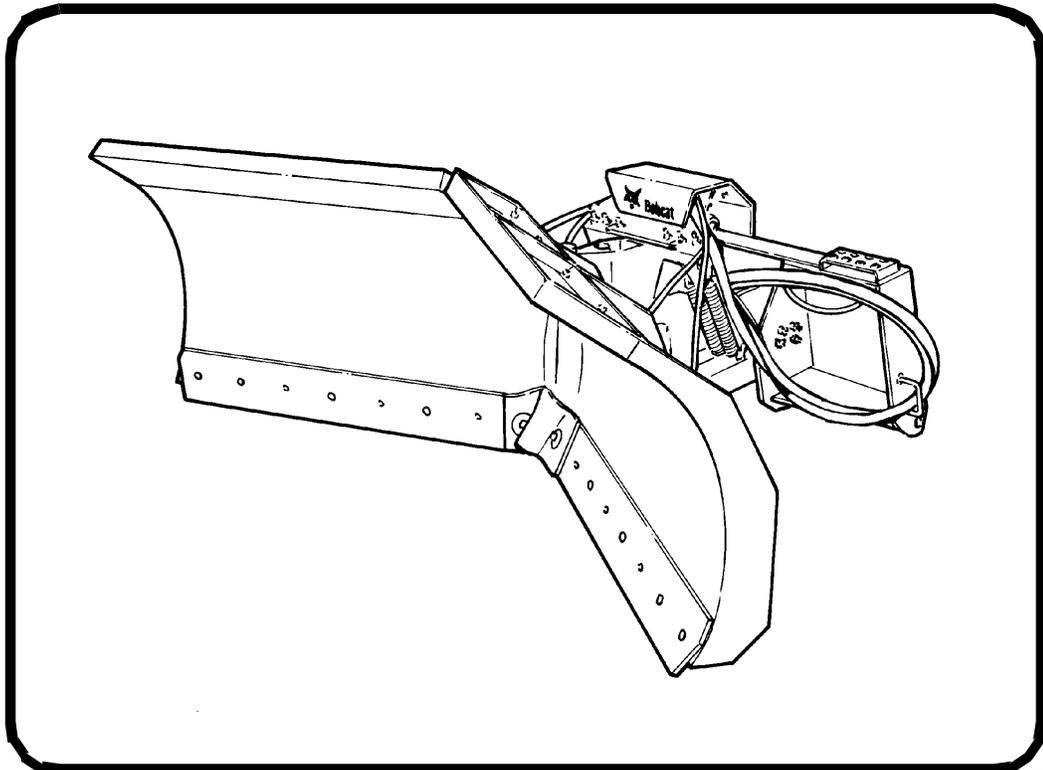
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## Service Manual

### V-Blade

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**(V-Blade 60 Man) S/N A01800101 & Above**  
**(V-Blade 60) S/N 083800101 & Above**  
**(V-Blade 60 7-Pin) S/N 084300101 & Above**  
**(V-Blade 72) S/N 083900101 & Above**  
**(V-Blade 72 Man) S/N A00900101 & Above**  
**(V-Blade 84) S/N 084000101 & Above**  
**(V-Blade 96) S/N 084100101 & Above**  
**(V-Blade 108) S/N 084200101 & Above**



Sample of manual. Download All 120 pages at:

<https://www.arepairmanual.com/downloads/2010-bobcat-v-blade-60v-blade-72v-blade-84v-blade-96v-blade-108-service-repair-workshop-manual/>

Product: 2010 Bobcat V-Blade 60,V-Blade 72,V-Blade 84,V-Blade 96,V-Blade 108 Service Repair Workshop Manual  
Full Download: <https://www.arepairmanual.com/downloads/2010-bobcat-v-blade-60v-blade-72v-blade-84v-blade-96v-blade-108-service-repair-workshop-manual/>

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# MAINTENANCE SAFETY



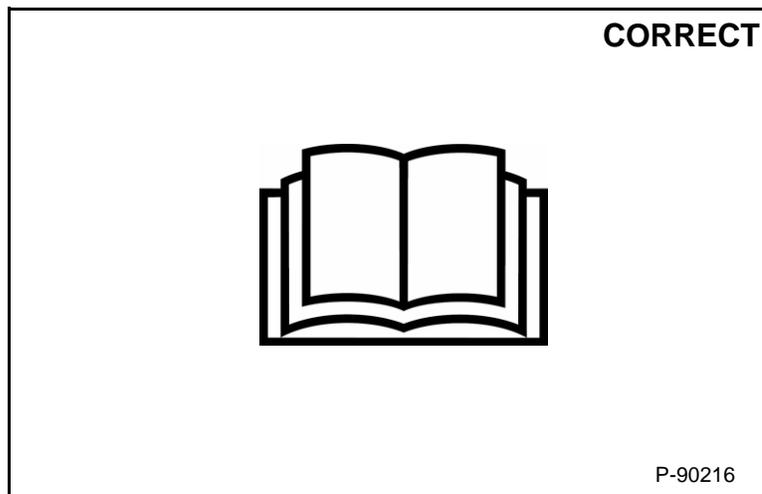
## WARNING

Instructions are necessary before operating or servicing machine. Read and understand the Operation & Maintenance Manual, Operator's Handbook and signs (decals) on machine. Follow warnings and instructions in the manuals when making repairs, adjustments or servicing. Check for correct function after adjustments, repairs or service. Untrained operators and failure to follow instructions can cause injury or death.

W-2003-0807



**Safety Alert Symbol:** This symbol with a warning statement, means: "Warning, be alert! Your safety is involved!" Carefully read the message that follows.



-  Never service attachments / implements without instructions. See Operation & Maintenance Manual and Attachment / Implement Service Manual.
-  Cleaning and maintenance are required daily.
-  Never service or adjust attachment / implement with the engine running unless instructed to do so in manual.
-  Always lower the attachment / implement to the ground before lubricating or servicing.
-  Avoid contact with leaking hydraulic fluid or diesel fuel under pressure. It can penetrate skin or eyes.
-  Stop, cool and clean engine of flammable materials before checking fluids.
-  Keep body, loose objects and clothing away from moving parts, electrical contacts, hot parts and exhaust.
-  Safety glasses are needed for eye protection from electrical arcs, battery acid, compressed springs, fluids under pressure and flying debris or when tools are used. Use eye protection approved for type of welding.



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## SERIAL NUMBER LOCATION

### Attachment Serial Number

Figure 1

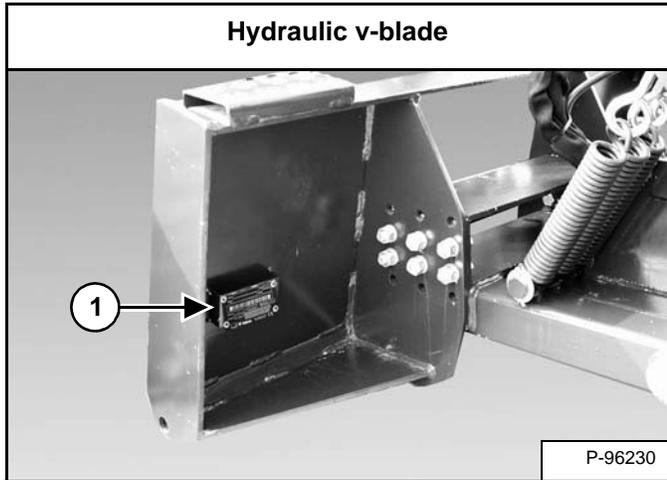
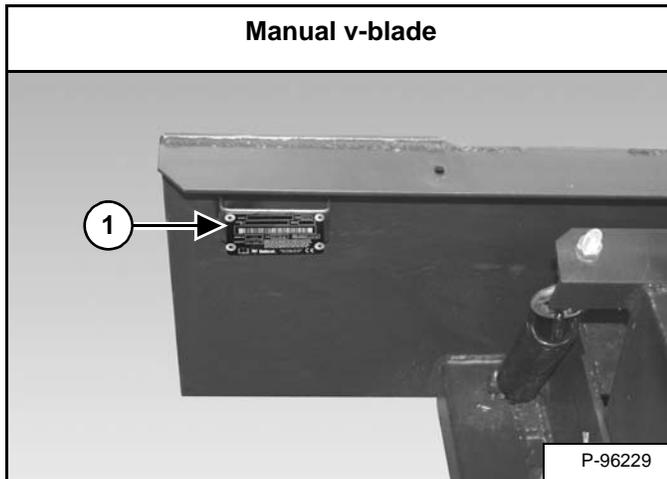


Figure 2



Always use the serial number (Item 1) **[Figure 1]** and **[Figure 2]** of the v-blade when requesting service information or when ordering parts. Earlier or later models (identification made by serial number) may use different parts, or it may be necessary to use a different procedure in doing a specific service operation.

## DELIVERY REPORT

Figure 3

DELIVERY REPORT

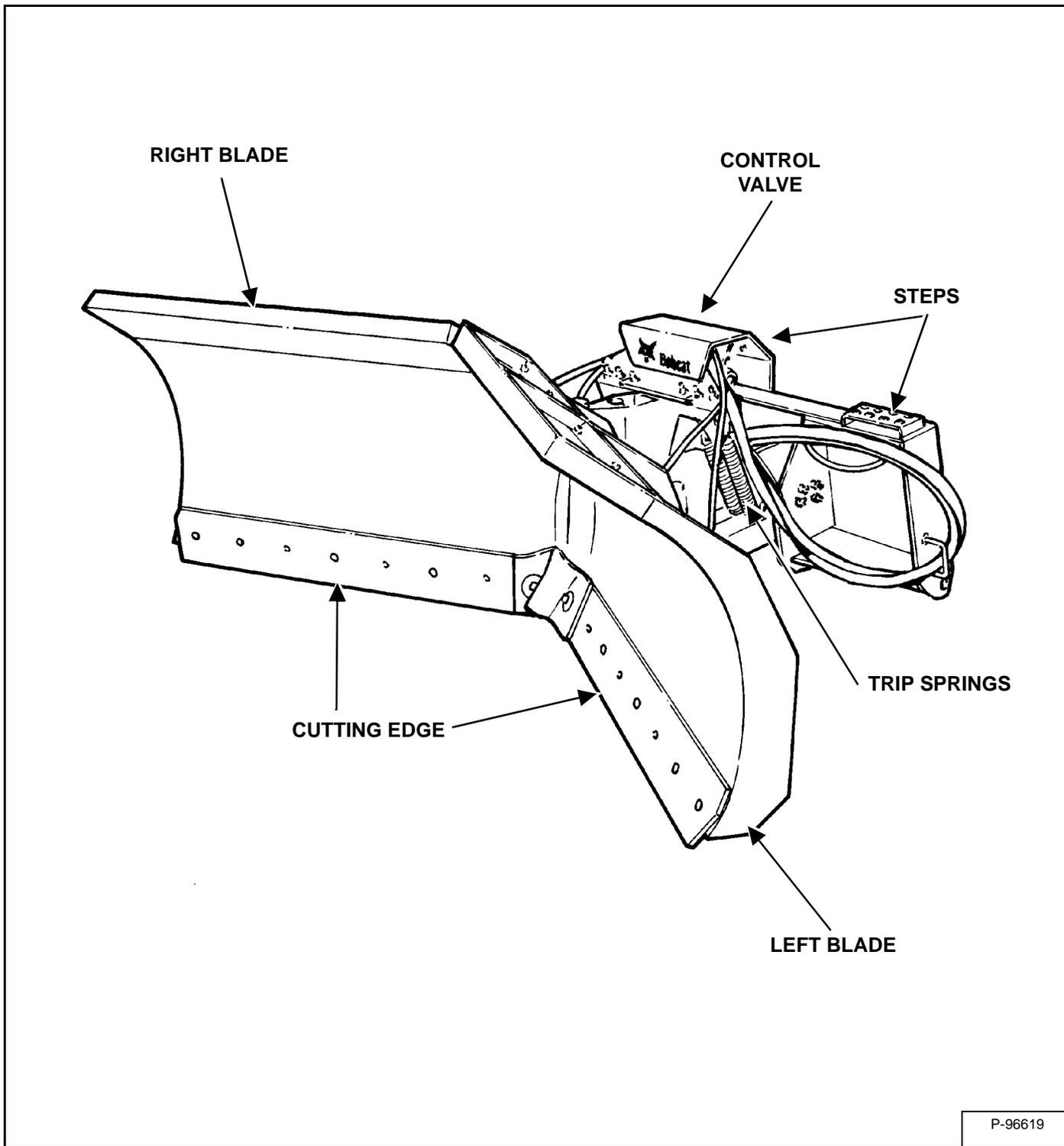
WARNING

P-20022

The image shows a form titled 'DELIVERY REPORT'. The form is divided into several sections with horizontal lines for text entry. At the top right, there is a section labeled 'DELIVERY REPORT'. Below it, there is a section labeled 'WARNING'. The form is enclosed in a rectangular border. In the bottom right corner, there is a small box containing the text 'P-20022'.

The delivery report **[Figure 3]** must be completed by the dealer and signed by the owner or operator when the Bobcat v-blade is delivered. An explanation of the form must be given to the owner.

# ATTACHMENT IDENTIFICATION

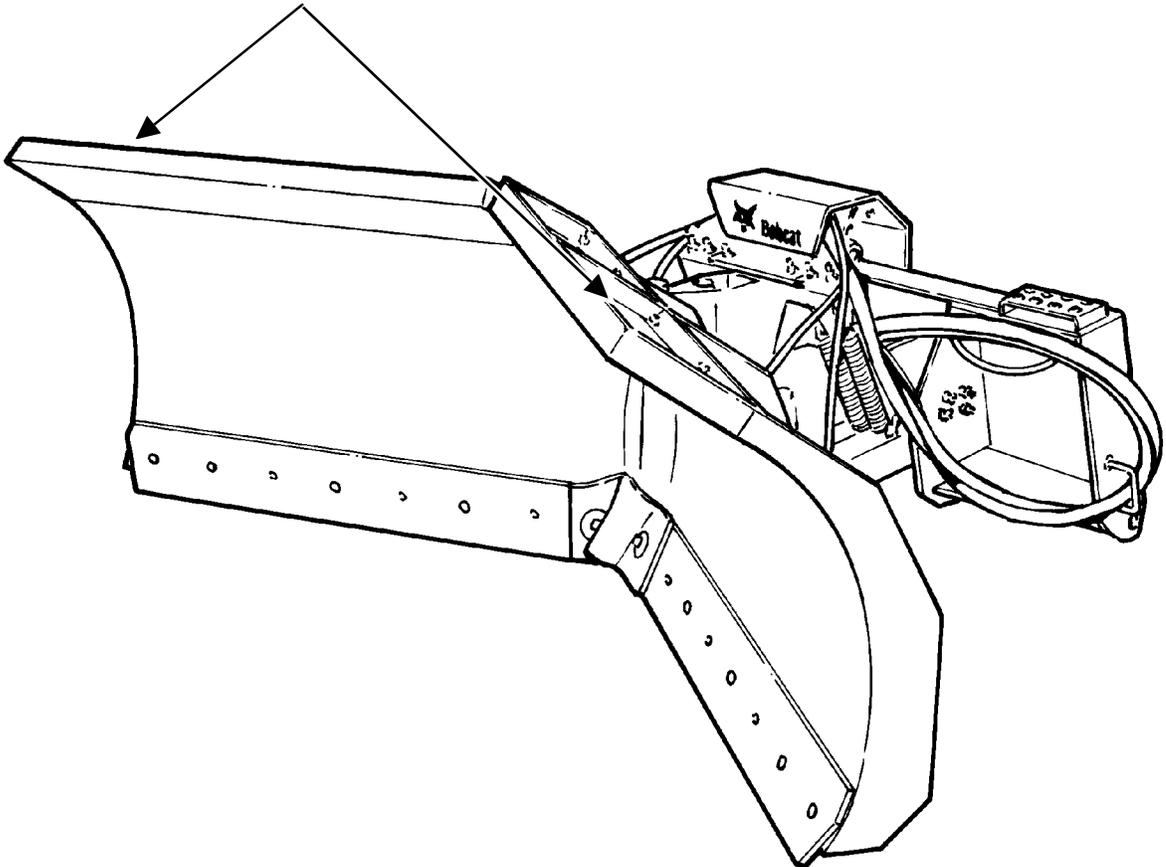


## ATTACHMENT SIGNS (DECALS)

Follow the instructions on all the Attachment Signs (Decals) that are on the attachment. Replace any damaged attachment signs and be sure they are in the correct locations. Attachment signs are available from your Bobcat attachment dealer.



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P-96619



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## SAFETY & MAINTENANCE

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## TROUBLESHOOTING

### Chart

 <b>WARNING</b>	<p>Instructions are necessary before operating or servicing machine. Read and understand the Operation &amp; Maintenance Manual, Operator's Handbook and signs (decals) on machine. Follow warnings and instructions in the manuals when making repairs, adjustments or servicing. Check for correct function after adjustments, repairs or service. Untrained operators and failure to follow instructions can cause injury or death.</p> <p style="text-align: right;">W-2003-0903</p>
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If the v-blade is not working correctly, check the hydraulic system of the machine thoroughly before making any repairs on the v-blade. V-Blade problems can be affected by a hydraulic system that is not operating to specifications. Connect a flow meter to the machine to check the hydraulic pump output, relief valve setting and tube lines to check flow and pressure. (See the machine's Service Manual for the correct procedure to connect the flow meter.)

Use the following troubleshooting chart to locate and correct problems which most often occur with the v-blade.

PROBLEM	CAUSE	CORRECTION
Blades will not angle.	Auxiliary hydraulics not engaged.	Engage auxiliary hydraulics.
	Hydraulic connections not made.	Connect hydraulics.
	Electrical connection not made.	Connect electrical.
Blade trips too easy.	Trip springs loose.	Tighten trip springs.
Blade trips hard.	Trip springs too tight.	Loosen trip springs.

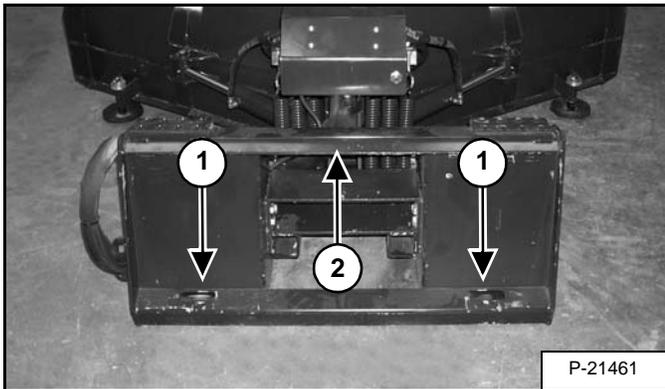


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## DAILY INSPECTION

### Attachment Mounting Frame

Figure 10-20-1



Inspect the Bob-Tach™ wedge mounts (Item 1), mounting flange (Item 2) **[Figure 10-20-1]** and all welds on the v-blade mount for wear and damage each time the v-blade is removed from the machine.

## DAILY INSPECTION (CONT'D)

### Bob-Tach

#### Hand Lever Bob-Tach

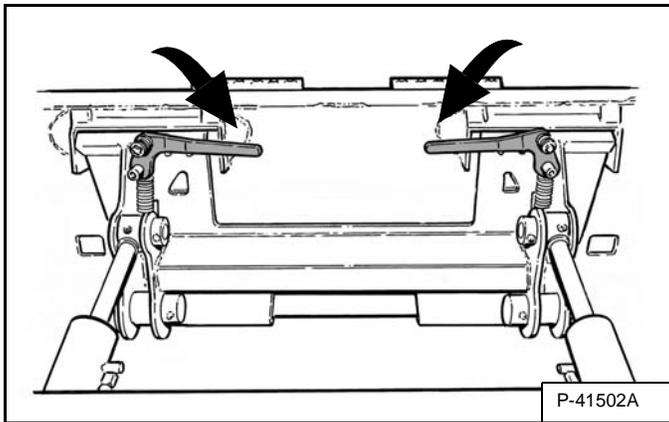
# ! WARNING

## AVOID INJURY OR DEATH

The Bob-Tach wedges must extend through the holes in the attachment mounting frame. Levers must be fully down and locked. Failure to secure wedges can allow attachment to come off.

W-2715-0208

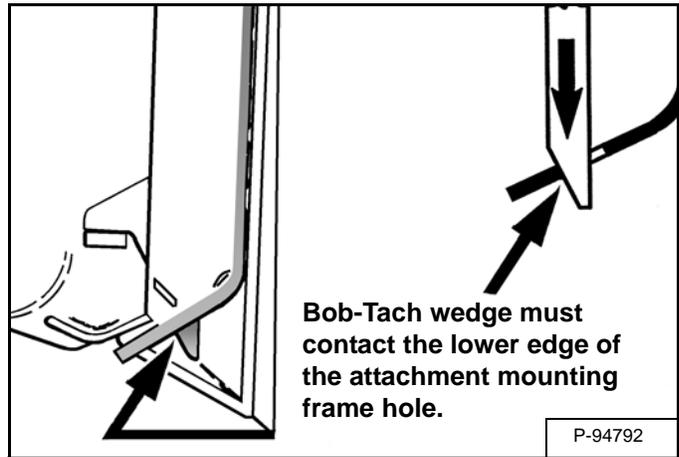
Figure 10-20-2



Push down on the Bob-Tach levers until they are fully engaged in the locked position [Figure 10-20-2] (wedges fully extended through the attachment mounting frame holes).

The levers and wedges must move freely [Figure 10-20-2].

Figure 10-20-3



The wedges must extend through the holes in the attachment mounting frame, securely fastening the attachment to the Bob-Tach [Figure 10-20-3].

**NOTE:** If the wedge does not contact the lower edge of the hole, the attachment will be loose and can come off the Bob-Tach.

Inspect the mounting frame on the v-blade. (See the machine's Operation & Maintenance Manual for inspecting the Bob-Tach). Replace any parts that are damaged, bent or missing. Keep all fasteners tight. Look for cracked welds. Contact your Bobcat dealer for repair or replacement parts.

Lubricate the wedges. (See the machine's Operation & Maintenance Manual for the correct procedure.)

## DAILY INSPECTION (CONT'D)

### Bob-Tach (Cont'd)

Power Bob-Tach



#### AVOID INJURY OR DEATH

The Bob-Tach wedges must extend through the holes in the attachment mounting frame. Levers must be fully down and locked. Failure to secure wedges can allow attachment to come off.

W-2715-0208

Figure 10-20-4

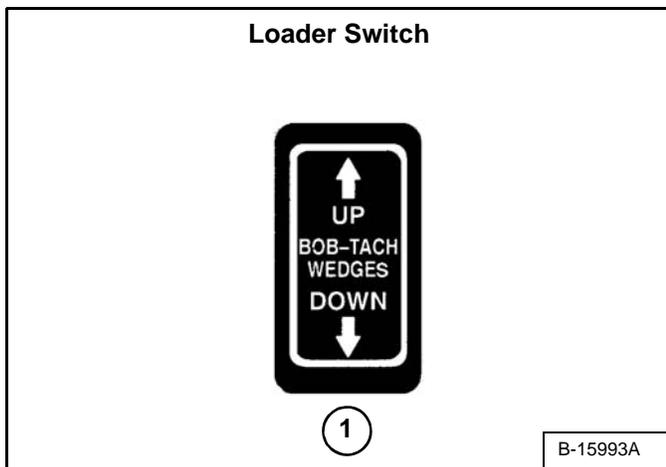


Figure 10-20-5

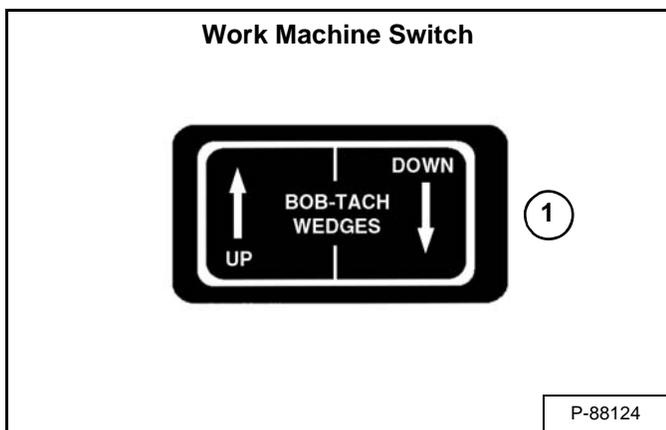
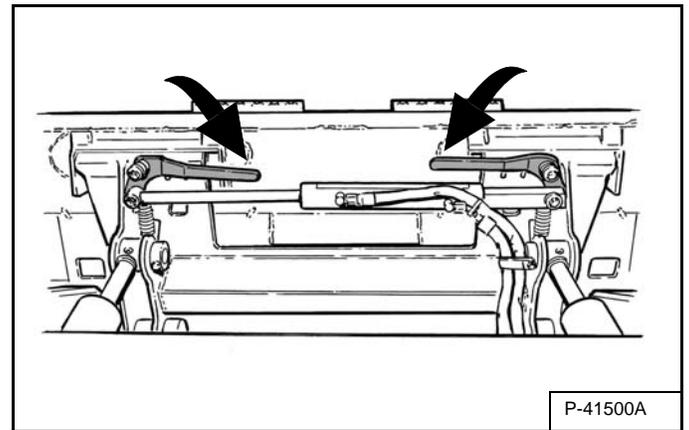
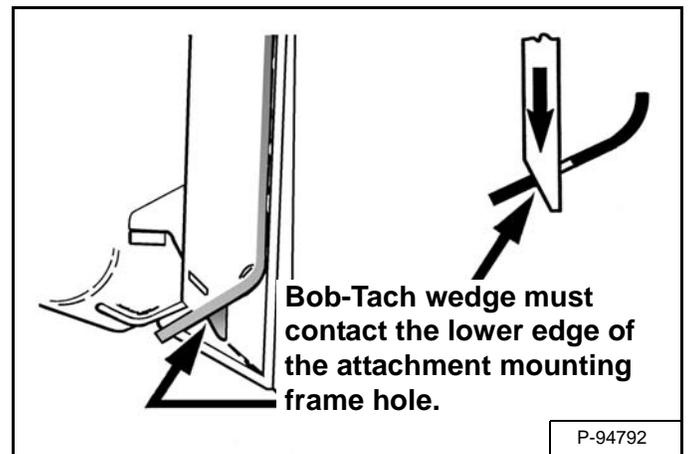


Figure 10-20-6



Push and hold the BOB-TACH “WEDGES DOWN” switch (Item 1) [Figure 10-20-4] or [Figure 10-20-5] until the levers are fully engaged in the locked position [Figure 10-20-6] (wedges fully extended through the attachment mounting frame holes).

Figure 10-20-7



The wedges must extend through the holes in the attachment mounting frame, securely fastening the attachment to the Bob-Tach [Figure 10-20-7].

**NOTE:** If the wedge does not contact the lower edge of the hole, the attachment will be loose and can come off the Bob-Tach.

Inspect the mounting frame on the attachment. (See the machine's Operation and Maintenance Manual for inspecting the Bob-Tach). Replace any parts that are damaged, bent or missing. Keep all fasteners tight. Look for cracked welds. Contact your Bobcat dealer for repair or replacement parts.

Lubricate the wedges. (See the machine's Operation & Maintenance Manual for the correct procedure.)



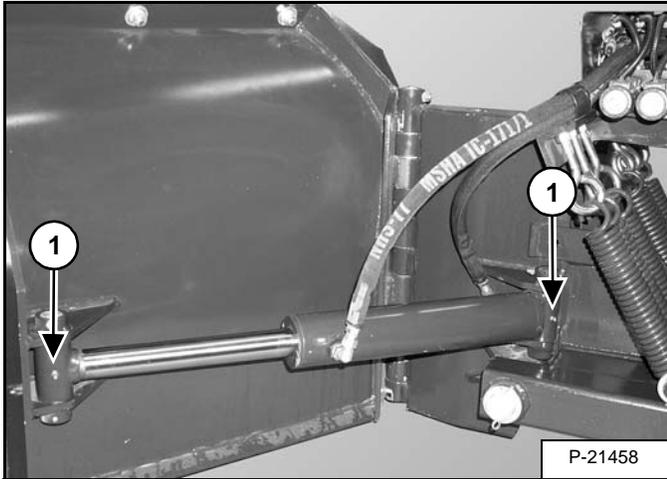
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## LUBRICATING THE ATTACHMENT

### Lubrication Locations

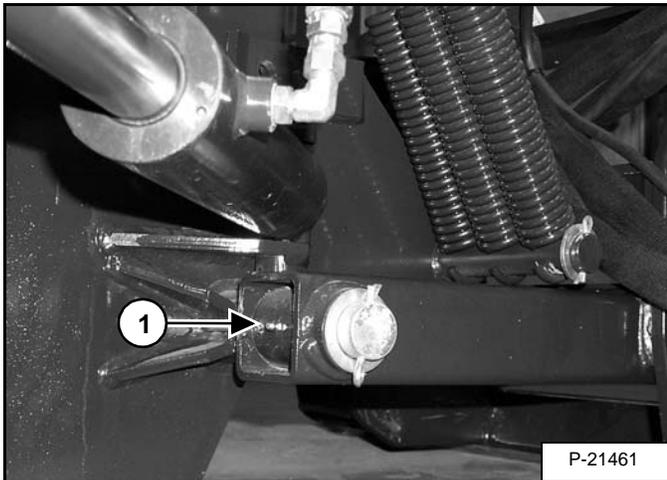
Always use a good quality lithium base grease when lubricating the v-blade. Apply the lubricant until extra grease shows.

**Figure 10-30-1**



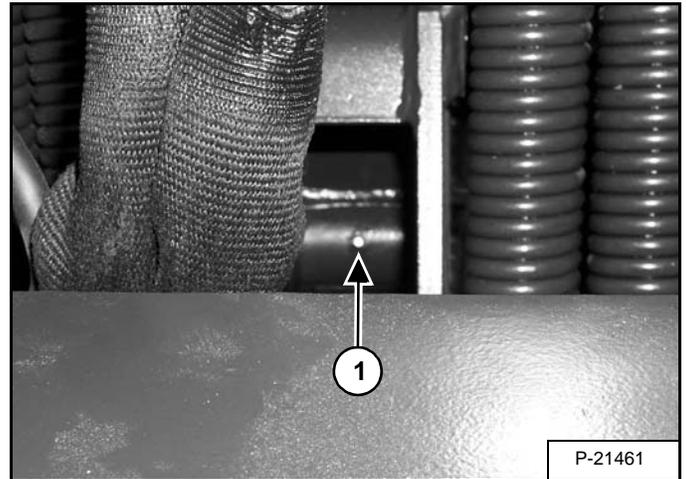
Add grease to the fittings on each end of the cylinders (Item 1) [Figure 10-30-1].

**Figure 10-30-2**



Add grease to the fitting (Item 1) [Figure 10-30-2] (One fitting on each side).

**Figure 10-30-3**



Add grease to the fitting (Item 1) [Figure 10-30-3]. Fitting is located in the center of the frame.



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## CUTTING EDGE

### Removal And Installation



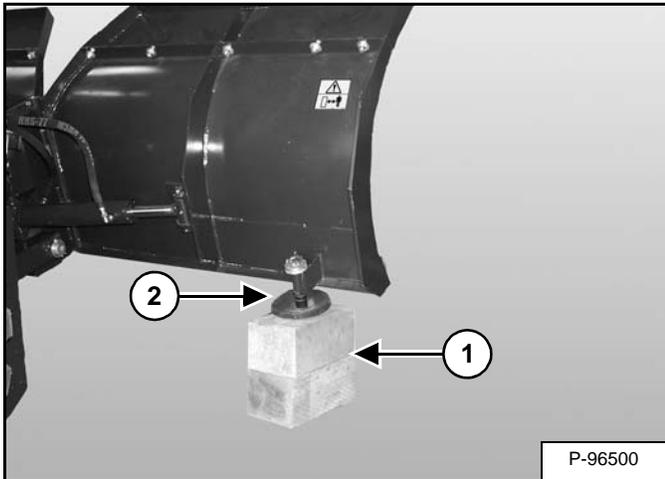
# WARNING

#### AVOID INJURY OR DEATH

Securely block up the attachment before working underneath.

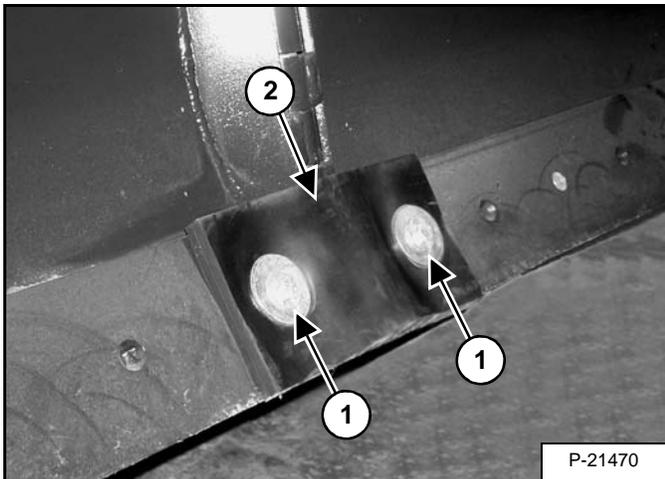
W-2795-0409

Figure 10-40-1



Lift v-blade up and place blocks (Item 1) under each skid shoe (Item 2) [Figure 10-40-1].

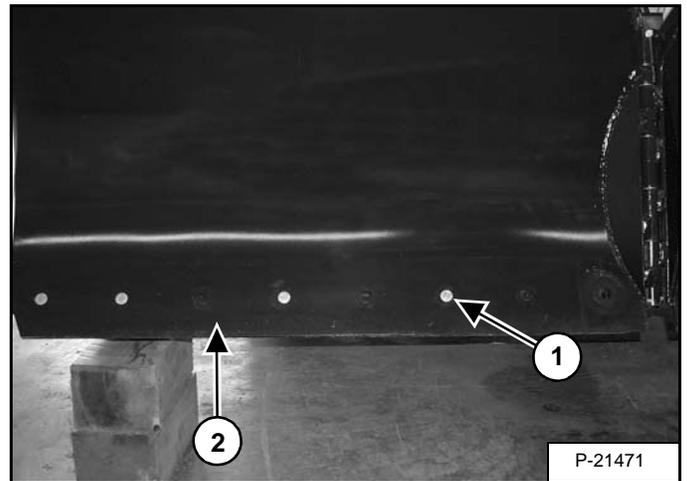
Figure 10-40-2



Remove the bolts and nuts (Item 1). Remove the center rubber cutting edge (Item 2) [Figure 10-40-2].

**Installation:** Install the center rubber cutting edge (Item 2). Install the nuts and bolts (Item 1) [Figure 10-40-2].

Figure 10-40-3



Remove the bolts and nuts (Item 1) [Figure 10-40-3] in the cutting edge.

Remove and replace cutting edge (Item 2) [Figure 10-40-3] using existing hardware or equivalent Grade 5 fasteners.

**Installation:** Tighten bolts to 125 - 140 ft.-lb. (170 - 190 N•m) torque.

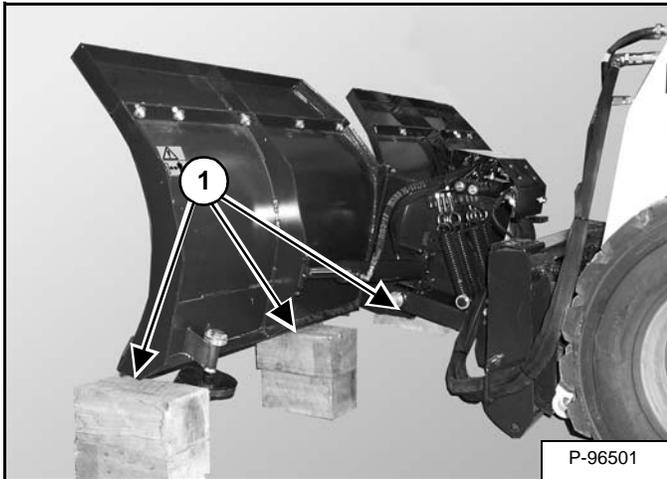


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## SKID SHOE

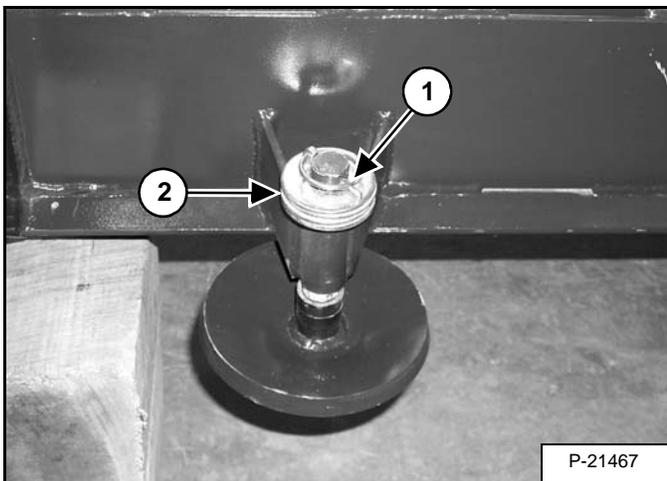
### Removal And Installation

Figure 10-50-1



Lift v-blade up and place blocks (Item 1) [Figure 10-50-1] under cutting edge then lower v-blade to blocks.

Figure 10-50-2



Remove retaining pin (Item 1) and washers (Item 2) [Figure 10-50-2].

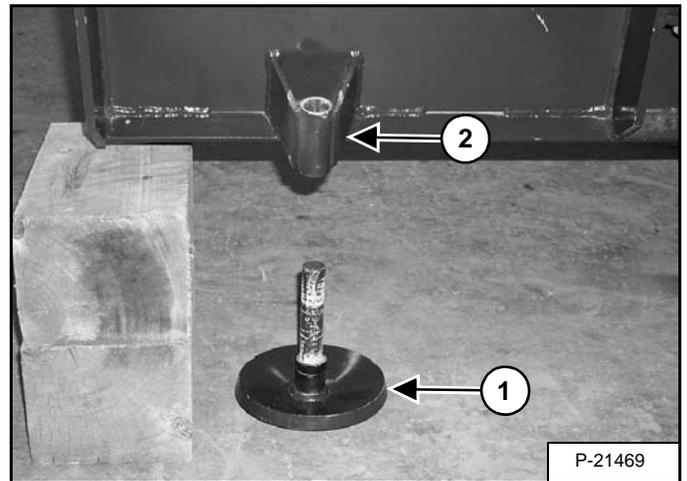


#### AVOID INJURY OR DEATH

Securely block up the attachment before working underneath.

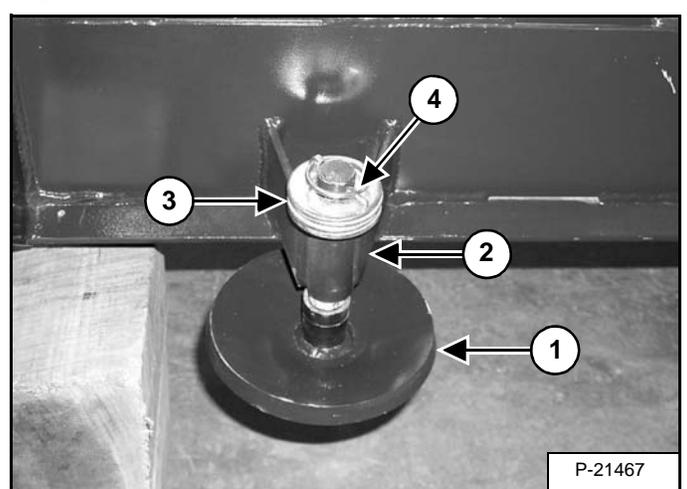
W-2795-0409

Figure 10-50-3



Remove skid shoe (Item 1) from mount (Item 2) [Figure 10-50-3].

Figure 10-50-4



Place the new skid shoe (Item 1) inside the mount (Item 2) [Figure 10-50-4], then lift the skid shoe up.

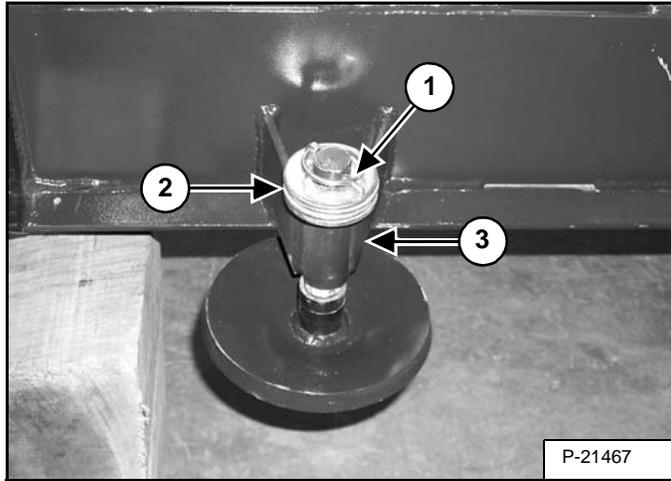
Install washers (Item 3) and retaining pin (Item 4) [Figure 10-50-4].

Adjust cutting edge height. (See Skid Shoe Height Adjustment on Page 10-50-2.)

## SKID SHOE (CONT'D)

### Skid Shoe Height Adjustment

Figure 10-50-5



To lower the cutting edge, remove the pin (Item 3), then move washers (Item 2) from the skid shoe shaft below the mount (Item 3) [Figure 10-50-5] to the shaft above the mount until the desired cutting edge height is obtained.

Reinstall the pin (Item 1) [Figure 10-50-5].

To raise the cutting edge, remove the pin (Item 1), then move washers (Item 2) from the skid shoe shaft above the mount (Item 3) [Figure 10-50-5] to the shaft below the mount until the desired cutting edge height is obtained.

Reinstall the pin.

## TRIP SPRINGS

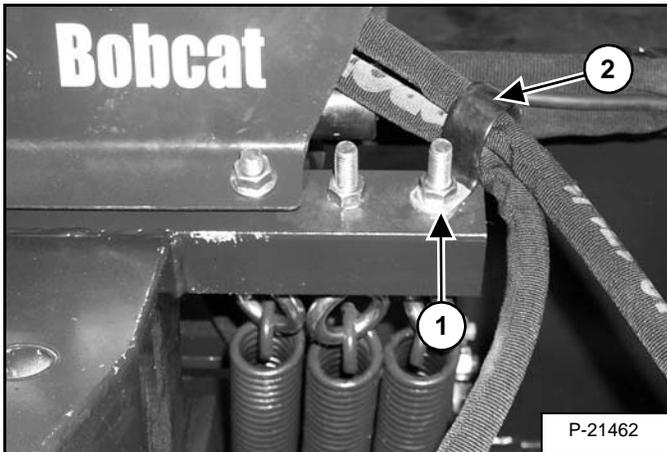
### Removal And Installation

# ! WARNING

Be careful when removing or installing parts which have spring tension. Wear safety glasses or goggles. Failure to obey warnings, can cause injury or death.

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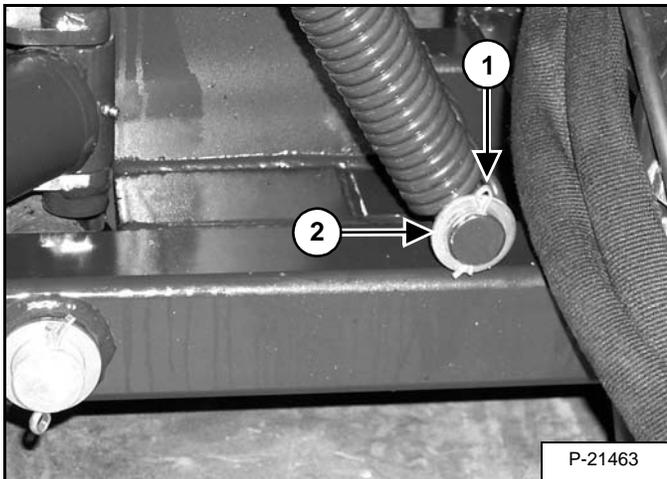
Figure 10-60-1



Remove nut (Item 1) [Figure 10-60-1].

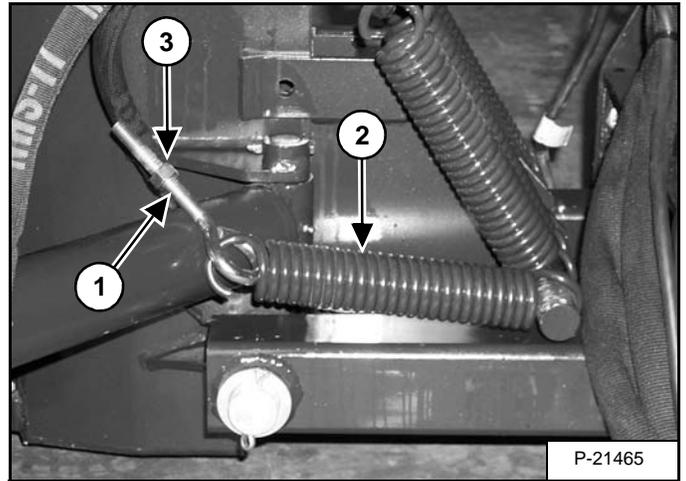
Remove hose clamp (Item 2) [Figure 10-60-1].

Figure 10-60-2



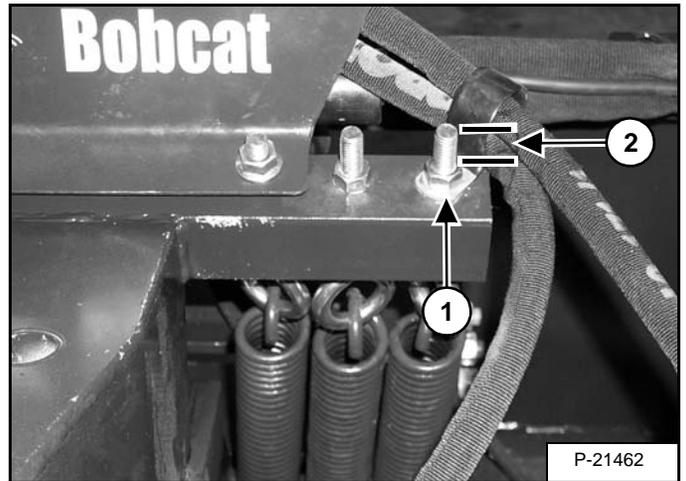
Remove cotter pin (Item 1) and washer (Item 2) [Figure 10-60-2].

Figure 10-60-3



Remove eyebolt (Item 1) and trip spring (Item 2) [Figure 10-60-3].

Figure 10-60-4



**Installation:** Place eyebolt through the mount and hose clamp, then tighten nut (Item 1) until there is approximately 1 in. (25 mm) of threads (Item 2) [Figure 10-60-4] above the nut.

Tighten lower nut (Item 3) [Figure 10-60-3].

Adjust the trip springs. (See Trip Springs Adjustment on Page 10-60-2.)

## TRIP SPRINGS (CONT'D)

### Trip Springs Adjustment

# WARNING

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W-2311-0398

Figure 10-60-5

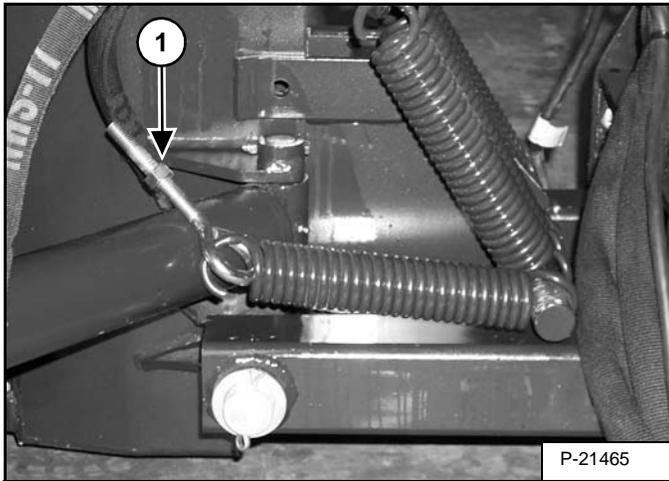
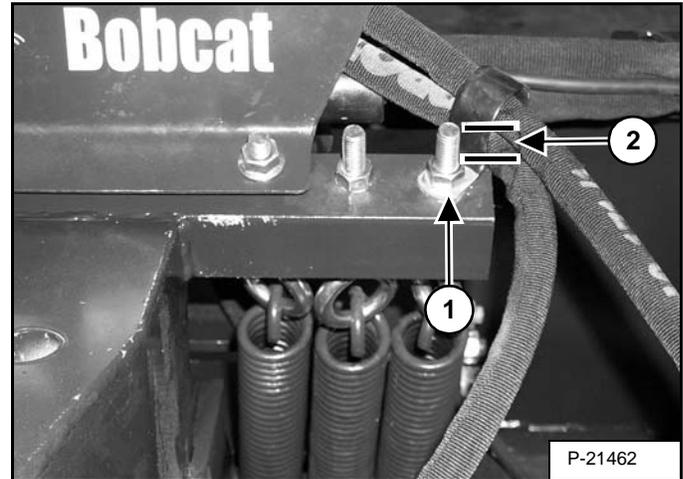


Figure 10-60-6



If the blade trips too easy, loosen lower nut (Item 1) [Figure 10-60-5], then tighten top nut (Item 1) [Figure 10-60-6] to desired tension.

If the blade trips hard, loosen top nut (Item 1) [Figure 10-60-6] to desired tension, then tighten lower nut (Item 1) [Figure 10-60-5].

**NOTE:** There should be the same amount of threads showing for all spring eye bolts (Item 2) [Figure 10-60-6] to maintain equal spring tension on all v-blade springs.

## HYDRAULIC SYSTEM

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